

18. Dans les acides de la série grasse, le carboxyle sera considéré comme faisant partie intégrante du squelette de carbone.

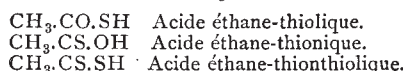
19. Le nom de tous les acides monobasiques de la série grasse est tiré de celui de l'hydrocarbure correspondant suivi du suffixe *oïque*.

On désignera les acides polybasiques par les terminaisons *dioïque*, *trioïque*, *tétroïque*, etc.

20. Les résidus monovalents des acides seront dénommés en transformant en *oyle* la terminaison *oïque* de l'acide.

21. Dans les acides monobasiques à chaîne normale saturée ou symétrique, le carbone du carboxyle porte le n° 1.

22. Les acides dans lesquels un ou plusieurs atomes de soufre remplacent autant d'atomes d'oxygène du carboxyle seront désignés comme suit : le soufre simplement lié à un atome de carbone sera désigné par le suffixe *thiol* ; si la liaison est double, on emploiera le suffixe *thion*. Exemples :



23. Le Congrès donne son adhésion à la proposition suivante sans émettre de vote définitif à ce sujet :

Les éthers-oxydes seront désignés par les noms des hydrocarbures qui les composent, reliés par le terme *-oxy-* (ex. pentane-oxy-éthane pour oxyde d'éthyle et d'amyle).

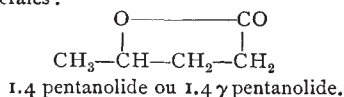
24. Les anhydrides d'acides conserveront leur mode actuel de désignation d'après le nom de leurs acides (ex. anhydride éthanoïque).

25. (12 bis). Dans le cas de deux chaînes latérales attachées au même atome de carbone, l'ordre dans lequel ces chaînes seront énoncées correspondra à leur ordre de complication.

26. Une discussion plus approfondie sur la nomenclature des composés à fonctions complexes est ajournée, et l'étude de cette question est renvoyée à la Commission internationale, pour qu'elle prépare sur ce point un projet qui sera présenté à un prochain Congrès ; la Commission cherchera à concilier les exigences de la nomenclature parlée avec celle d'une terminologie applicable aux dictionnaires.

27. On conservera les conventions habituelles pour les sels ou éthers composés.

28. Les lactones seront désignées par le mot *olide*, indiquant que c'est un anhydride interne d'alcool et d'acide. La position de la fonction alcoolique, par rapport au carboxyle de l'acide alcool d'où dérive la lactone, pourra être exprimée par les lettres grecques α , β , γ , δ , à côté du numérotage habituel des chaînes latérales :



29. Les acides lactoniques dérivant d'acides bibasiques seront nommés comme les lactones dont ils dérivent, en ajoutant le suffixe *oïque*, caractéristique des acides.

30. La discussion sur les chaînes fermées est ajournée jusqu'au moment où la publication des idées de M. Armstrong, sur ce sujet, aura permis à la Commission internationale de les comparer avec les propositions de M. Bouveault.

31. Dans la série aromatique et tous les corps renfermant une chaîne fermée, toutes les chaînes latérales seront considérées comme des substituants.

32. Aldéhydes. Seront désignées par le suffixe *al* (méthanal, éthanal).

Aldéhydes sulfurés : suffixe *thial*.

33. Acétones : suffixe *one* ($\text{CH}_3.\text{CO}.\text{CH}_3$, butanone 2).

Diacétones, triacétones : suffixes *dione*, *trione*.

Acétones sulfurées : suffixe *thione*.

34. Quinones : Le suffixe *quinone* sera conservé pour les corps homologues de la quinone ordinaire.

Les corps ayant plusieurs fois le chaînon $\text{CO}.\text{CO}$ seront des diquinones ou triquinones.

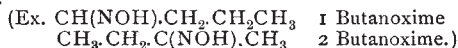
35. Ammoniaques composées : pas de changement (ex. éthylamine, éthène-diamine).

Les corps où le groupe bivalent $-\text{NH}-$ ferme une chaîne formée de radicaux positifs seront appelés *imines* (ex. éthène-imine).

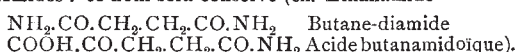
Phosphines, arsines, stibines, sulfines : la nomenclature en usage est conservée.

36. Hydroxylamine : ce nom est conservé.

37. Oximes : seront désignés en suivant les règles actuellement admises ; les corps *isonitrés* seront nommés comme oximes.



38. Amides : ce nom sera conservé (ex. Ethanamide



Imides : seront conservées.

Amidoximes : ce nom sera conservé.



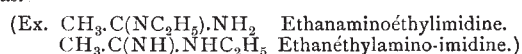
Urée : le mot générique *urée* sera conservé, on l'emploiera comme suffixe pour les dérivés alcoylés de l'urée, tandis que les dérivés par substitution acide seront des *uréides*.

Les corps dérivant de deux molécules d'urée seront désignés par les suffixes *diurée*, *diuréide*. Les uréides acides prendront le nom d'*acides uréiques*. On rejettera les désinences *uramique* et *urique*.

39. Amidines : ce suffixe sera conservé.

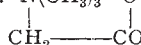


Pour les dérivés, le nom sera dédoublé, et l'on fera précéder du nom du groupe substituant, soit amino, soit amidine, suivant le cas.



Guanidines : le mot générique *guanidine* est conservé, mais différentes guanidines seront nommées comme dérivés substitués de la diamidocarbo-imidine.

40. Bétaines : suffixe *tainé*.



41. Nitriles : la question est laissée en suspens pour la série grasse. Pour la série aromatique, on adopte le préfixe *cyano* (comme nom de substituant).

42. Carbylamine : la nomenclature actuelle est conservée.

43. Sulfones : ce nom est conservé.



Sulfures : on les désignera en intercalant *thio* entre les noms des deux composés saturés (décision provisoire).



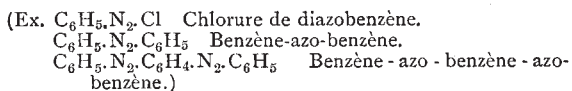
Disulfures : seront désignés de même par *dithio*.

44. Ethers isocyaniques : suffixe *carbonimide*. Ex. Ethyl-carbonimide désignera le cyanate d'éthyle de Wurtz ; on dira de même éthylthiocarbonimide pour le dérivé sulfuré correspondant.

Cyanates : ce nom est conservé aux vrais éthers qui, par saponification, donnent de l'acide cyanique ou ses produits directs d'hydratation. On remplacera le nom de sulfo-cyanate par celui de *thiocyanate*.

45. Corps nitrés : rien à changer à la nomenclature actuelle.

46. Corps azoïques : les dénominations *azo* et *diazo* seront conservées, mais le mode d'énonciation de ces composés sera modifié comme suit :



THE GEOLOGY OF BARBADOS.¹

THE oceanic series of Barbados forms a group of beds which is clearly marked off from the Scotland series below, and the coral limestone above. The oceanic deposits do not, however, appear everywhere as a continuous band between the two other formations, because the elevation of the island from oceanic depths was accompanied by a considerable amount of faulting, and tracts of the oceanic deposits were dropped down between blocks of the Scotland series. Although this faulting

¹ "The Geology of Barbados. Part II. The Oceanic Deposits." By A. J. Jukes Browne and J. B. Harrison. Abstract of paper printed in the Quarterly Journal of the Geological Society, May 1892.

interferes with the continuity of the oceanic deposits, it is abundantly clear from numerous sections that they rest unconformably upon the Scotland series, and are as distinct in respect of age as they are in respect of lithological composition, and a greater contrast in all respects can hardly be imagined than these two formations present.

The oceanic series is more than 300 feet thick, and is divisible into five portions, which, however, blend into one another. These are, in descending order—

(1) Grey siliceous mudstones, consisting chiefly of fine volcanic dust, with a few fragments of siliceous organisms.

(2) Very fine-grained argillaceous earths, often red or pink, but sometimes yellow or buff; these are analogous to modern oceanic "red clays."

(3) Pulverulent chalky marls and earths, being consolidated foraminiferal oozes passing down into calcareo-siliceous earth with Radiolaria; proportion of carbonate of lime, 80 to 44 per cent.

(4) Siliceous Radiolarian earth, consisting mainly of Radiolaria, with sponge spicules and Diatoms, and a small amount of fine calcareous matter.

(5) Calcareo-siliceous earths, with 25 to 40 per cent. of carbonate of lime passing down into purer chalky earth, with 60 to 80 per cent., which is in some places converted into limestone by the infiltration of calcite.

There is a considerable variation in the amount of chalky matter even on what appears to be the same horizon, and within short distances. The whole series is more calcareous in the northern than in the southern part of the island.

Interstratified layers of volcanic sand and dust occur at several horizons, some of them being light grey pumiceous and felspathic sand, and others a mixture of such material with Radiolarian earth stained brown by what seems to be petroleum.

With respect to organic remains, the calcareous earths have yielded *Foraminifera* in abundance, a preliminary examination of six samples by the late Dr. H. B. Brady resulting in the discovery of 81 species. The siliceous earths have furnished the specimen of *Cystechinus crassus* recently described by Mr. J. W. Gregory, and they abound in Radiolaria, as is very well known. Certain marls and limestones on Bissex Hill prove to consist mainly of *Globigerina*.

The bearing of these fossils is discussed with regard to (1) the age, (2) the conditions of depth, at which the deposits were formed. The age is Pliocene, or Pleistocene, while stratigraphical considerations make it most probable that they are of Pliocene date.

The depth of water indicated by the Foraminifera is from 500 to 1000 fathoms, according to Dr. Brady. The *Cystechinus* is considered by Mr. Gregory as strong evidence for a depth of over 1000 fathoms, and is quite consistent with a depth of over 2000; while the Radiolaria are, in Prof. Haeckel's opinion, most nearly allied to those which occur in the deepest parts of modern oceans, *i.e.* about 3000 fathoms.

The coloured clays are remarkable for the almost complete absence of carbonate of lime; they correspond in all essential points to those modern argillaceous oozes which occur at from 2500 to 3000 fathoms, and have little or no carbonate of lime.

The available evidence points to the conclusion that the depth of water varied from 1000 to 2500 fathoms, and there may have been two epochs at which it was over 2000 fathoms.

Radiolarian deposits have for some years been known to exist in Trinidad, and the authors, having obtained samples, are able to announce that these closely resemble the Barbadian earths in general aspect, in chemical composition, and in microscopical structure. Similar earths also appear to exist in Hayti.

Finally, they discuss the changes in physical geography

which are indicated by the existence of these deposits, and their probable equivalent in part of the white limestone of Jamaica; and they infer that the whole Central American and Caribbean region was deeply submerged during the Pliocene period, and that during this time there was open and free communication between the Atlantic and Pacific Oceans. The separation of the two oceans, and the deflection of the Gulf Stream, were changes accomplished by the upheaval of which evidence was adduced in a former paper, and this upheaval is a comparatively recent event.

The minute structure of the rocks is described in reports presented by Mr. W. Hill and Miss C. A. Raisin; the former showing that the Barbados chalk is similar in all essential points to the Chalk of England.

EDUARD VON REGEL.

THE learned and genial Director of the St. Petersburg Botanic Garden, Dr. Eduard von Regel, died on April 27, in his seventy-seventh year. He was the son of a Gotha parson, and developed a taste for gardening while still quite young. During the hours that might have been given to play he was usually engaged at his favourite pursuit in his father's garden. After the usual course of education, he spent several years in various botanic gardens, and about 1842 he was appointed "Ober Gärtner" in the Botanic Garden at Zurich. Here, in conjunction with Dr. O. Heer, the celebrated palæontologist, one of whose daughters he subsequently married, he at once founded a Swiss journal for agriculture and horticulture, and was exceedingly active in promoting horticulture, both in writing and practically. In 1852 he founded the now well-known and still flourishing *Gartenflora*, which, however, he ceased to edit after 1885. He soon gained fame, and when the important post of Scientific Director of the St. Petersburg Botanic Garden became vacant in 1855, it was offered to and accepted by Regel, and held by him to the last. There he found a wide field for his energy and abilities: but although he accomplished much meritorious botanical work, Russia is far more indebted to him for the improvements he effected in horticulture generally than for his botany. At the time when he first went to St. Petersburg, gardening was at a very low ebb, and the vast strides that have since been made in this industry are very largely due to his untiring efforts. He wrote treatises, introduced superior varieties of fruits, vegetables, and flowers, and succeeded in gaining the influence and support of exalted persons for his projects both botanical and horticultural. It was mainly through his exertions, we believe, that the first flower-show was held in St. Petersburg. This was in 1858, and now such a thing is no uncommon event. He was also instrumental in getting botanists attached to the Russian exploring expeditions in Central and Eastern Asia, whereby the gardens and herbaria, not only of Russia, but of Europe, have been greatly enriched, and botanical science advanced. Regel himself elaborated many of the dried collections thus obtained, besides describing a large number of plants cultivated in the garden from seeds or bulbs sent thither by various travellers. One of the best of his numerous writings is a monograph of the genus *Allium*—"Alliorum adhuc cognitorum Monographia,"—the number of species described exceeding 250, including a large number previously undescribed, the fruits of the explorations in Asia. He was also joint author of an enumeration of the plants collected in Siberia by Semenoff, Radde, Stubendorff, and others. Although gradually declining in health during the last year or so, he continued to discharge the duties of his office; and although not so active with his pen as formerly, he contributed some descriptions of new plants